



### APPENDIX F - SUPPLEMENTAL STRUCTURAL INSPECTION PROGRAM

#### **A. STRUCTURAL DTRS & REPORT FORMS**

A Supplemental Structural Inspection Program (SSIP) is required to ensure the continued availability of damage tolerance in all structural elements. The Boeing Damage Tolerance Rating (DTR) System has been used to substantiate this requirement. The DTR Check Forms that were previously found in this Appendix have been relocated to Boeing Document D626A001-DTR and includes instructions for use. A set of filled forms supports the Boeing suggested program, which is provided in Structures Section and can be identified by the letter F (for Fatigue) in the program (PGM) column.

Discrepant Structure Reports (DSR) are required for the reporting of all structural discrepancies found as a result of inspection tasks performed as part of an SSIP. The reports are a requirement of the FAA as contained in Section 9 "Airworthiness Limitations and Certification Maintenance Requirements" and are to be submitted to the FAA Certification Office, Seattle and to Boeing.

The required reporting form is the Discrepant Structure Report form, which is attached to this Appendix.



DISCREPANT STRUCTURE REPORT				SIDE 1
<b>1. REPORT DATA</b>		<b>A.T.A. INDEX</b> _____	<b>REPORT NO.</b> _____	
<b>AIRLINE AGENCY</b> _____	<b>STATION</b> _____	<b>MONTH</b> _____	<b>DAY</b> _____ <b>YEAR</b> _____	
<b>2. AIRCRAFT DATA</b>		<b>MODEL</b> _____	<b>SERIES</b> _____ <b>TAIL NO.</b> _____	
<b>MFG. SERIAL NO.</b> _____		<b>FLIGHT HOURS</b> _____	<b>FLIGHT CYCLES</b> _____	
<b>3. COMPONENT DATA (AS APPLICABLE AND AVAILABLE):</b>				
<b>NAME</b> _____		<b>P/N</b> _____	<b>S/N</b> _____	
<b>IPC/DWG. REF.</b> _____		<b>SRM REF.</b> _____		
<b>COMPLETE THE FOLLOWING IF KNOWN AND DIFFERENT FROM SECTION 2:</b>				
<b>COMPLETE FLIGHT HOURS SINCE NEW</b> _____		<b>SINCE OVERHAUL</b> _____		
<b>COMPONENT FLIGHT CYCLES SINCE NEW</b> _____		<b>SINCE OVERHAUL</b> _____		
<b>4. REPAIR DATA</b>		<input type="checkbox"/> <b>PLANNED</b>	<input type="checkbox"/> <b>COMPLETED</b>	
<b>4A. ACTION</b> _____				
_____				
_____				
<b>4B. REFERENCES ASSOCIATED WITH INSPECTION/REPAIR (SPECIFY NO., PAGE, FIGURE, ETC.)</b>				
<b>SB</b> _____ <b>AD</b> _____		<b>IPC</b> _____	<b>SRM</b> _____	
<b>MPD</b> _____ <b>OTHER (E.G., SDR, MRR)</b> _____		<b>SNA</b> _____		
<b>STRUCTURAL SIGNIFICANT ITEM NO.</b> _____		<b>SERIES 50 NO.</b> _____		
<b>5. SERVICE BULLETINS INCORPORATED IN AREA OF DISCREPANCY</b>				
<b>SERVICE BULLETIN NO.</b>	<b>APPLICABLE SECTION OF SERVICE BULLETIN</b>	<b>DATE OF INCORPORATION</b>	<b>TOTAL FLIGHT HOURS AND CYCLES AT INCORPORATION</b>	
_____	_____	_____	<b>HOURS</b> _____ <b>FLIGHTS</b> _____	
_____	_____	_____	<b>HOURS</b> _____ <b>FLIGHTS</b> _____	
_____	_____	_____	<b>HOURS</b> _____ <b>FLIGHTS</b> _____	
<b>6. INSPECTION DATA (COMPLETE KNOWN INFO., CHECK APPROPRIATE ITEMS FOR DISCREPANT STRUCTURE):</b>				
<b>CURRENT INSPECTION INTERVALS (FLIGHTS)</b> _____				
<b>CORRESPONDING INSPECTION LEVELS</b> _____				
<b>6A. WHEN DISCOVERED</b>		<b>6B. INSPECTION LEVEL</b>	<b>6C. INSPECTION LEVEL</b>	
<input type="checkbox"/> SCHEDULED MAINTENANCE		<input type="checkbox"/> WALK-AROUND	<input type="checkbox"/> VISUAL	
<input type="checkbox"/> OVERHAUL		<input type="checkbox"/> GENERAL VISUAL	<input type="checkbox"/> MAG. VISUAL	
<input type="checkbox"/> UNSCHEDULED		<input type="checkbox"/> EXTERNAL SURVEILLANCE	<input type="checkbox"/> DYE PENETRANT	
<input type="checkbox"/> SPECIAL/DIRECTED (AD, SB, ..)		<input type="checkbox"/> INTERNAL SURVEILLANCE	<input type="checkbox"/> ULTRASONIC	
<input type="checkbox"/> SYMPTOM FUEL/PRESS LEAK..)		<input type="checkbox"/> DETAILED	<input type="checkbox"/> X-RAY	
<input type="checkbox"/> RELATED FLEET EXPERIENCE		<input type="checkbox"/> SPECIAL	<input type="checkbox"/> LOW FREQUENCY	
<input type="checkbox"/> ACCIDENT INVESTIGATION		<input type="checkbox"/> _____	<input type="checkbox"/> EDDY CURRENT	
<input type="checkbox"/> SSID			<input type="checkbox"/> HIGH FREQUENCY	
<input type="checkbox"/> SERIES 50			<input type="checkbox"/> EDDY CURRENT	
<input type="checkbox"/> _____			<input type="checkbox"/> BORESCOPE	
			<input type="checkbox"/> MAGNETIC	
			<input type="checkbox"/> PARTIAL	
			<input type="checkbox"/> TAP TEST	
			<input type="checkbox"/> SOUND	
			<input type="checkbox"/> SMELL	
			<input type="checkbox"/> FEEL	
			<input type="checkbox"/> FUEL LEAK	
			<input type="checkbox"/> PRESS. LOSS	

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Figure F-1 DISCREPANT STRUCTURE REPORT FORM - SIDE 1



DISCREPANT STRUCTURE REPORT		SIDE 2																																								
<b>7. DISCREPANCY DESCRIPTION:</b> _____ _____ _____ _____ _____ <div style="text-align: center; font-size: small; margin-top: 10px;">Attach sketch, photos and text as required to describe defect and specific location. When applicable give details of associated discrepancies on the same aircraft, related experience with this discrepancy on any aircraft, and previous modification(s) to the discrepant structure.</div>																																										
<b>7A. TYPE OF DISCREPANCY:</b> <table style="width: 100%;"><tr><td><input type="checkbox"/> BENT</td><td><input type="checkbox"/> CONTAMINATED</td><td><input type="checkbox"/> DENTED</td><td><input type="checkbox"/> LOOSE</td><td><input type="checkbox"/> WRINKLED</td></tr><tr><td><input type="checkbox"/> BROKEN</td><td><input type="checkbox"/> CORRODED</td><td><input type="checkbox"/> DETACHED</td><td><input type="checkbox"/> MISSING</td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/> BUCKLED</td><td><input type="checkbox"/> CRACKED</td><td><input type="checkbox"/> IMPROPERLY ADJUSTED</td><td><input type="checkbox"/> OUT-OF-TOLERANCE</td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/> BURNED</td><td><input type="checkbox"/> DEFORMED</td><td><input type="checkbox"/></td><td><input type="checkbox"/> STRUCK</td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/> CLOGGED</td><td><input type="checkbox"/> DELAMINATED</td><td><input type="checkbox"/> LEAK</td><td><input type="checkbox"/> WORN</td><td><input type="checkbox"/></td></tr></table>			<input type="checkbox"/> BENT	<input type="checkbox"/> CONTAMINATED	<input type="checkbox"/> DENTED	<input type="checkbox"/> LOOSE	<input type="checkbox"/> WRINKLED	<input type="checkbox"/> BROKEN	<input type="checkbox"/> CORRODED	<input type="checkbox"/> DETACHED	<input type="checkbox"/> MISSING	<input type="checkbox"/>	<input type="checkbox"/> BUCKLED	<input type="checkbox"/> CRACKED	<input type="checkbox"/> IMPROPERLY ADJUSTED	<input type="checkbox"/> OUT-OF-TOLERANCE	<input type="checkbox"/>	<input type="checkbox"/> BURNED	<input type="checkbox"/> DEFORMED	<input type="checkbox"/>	<input type="checkbox"/> STRUCK	<input type="checkbox"/>	<input type="checkbox"/> CLOGGED	<input type="checkbox"/> DELAMINATED	<input type="checkbox"/> LEAK	<input type="checkbox"/> WORN	<input type="checkbox"/>															
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<b>7B. SIZE OF DISCREPANCY:</b> <input type="checkbox"/> INCHES, OR <input type="checkbox"/> CENTIMETERS AREA _____ X _____ DEPTH _____ CRACK LENGTH INITIALLY DETECTED _____ DATE _____ FINAL MEASUREMENT (IF DIFFERENT) _____ DATE _____																																										
<b>7C. DISCREPANT PART:</b> <table style="width: 100%;"><tr><td><input type="checkbox"/> FRAME/BULKHEAD</td><td><input type="checkbox"/> SKIN</td><td><input type="checkbox"/> JOINT/SPICE</td></tr><tr><td><input type="checkbox"/> PRESSURE BULKHEAD</td><td><input type="checkbox"/> PLATE/PANEL</td><td><input type="checkbox"/> LUG</td></tr><tr><td><input type="checkbox"/> FRAME AROUND OPENING</td><td><input type="checkbox"/> CHORD</td><td><input type="checkbox"/> WELD</td></tr><tr><td><input type="checkbox"/> WINDOW FORGING</td><td><input type="checkbox"/> STRINGER NO.</td><td><input type="checkbox"/> BOND</td></tr><tr><td><input type="checkbox"/> KEEL BEAM</td><td><input type="checkbox"/> BEAM</td><td><input type="checkbox"/> OPEN HOLE</td></tr><tr><td><input type="checkbox"/> FLOOR</td><td><input type="checkbox"/> STRUT/BRACE</td><td><input type="checkbox"/> FASTENER HOLE</td></tr><tr><td><input type="checkbox"/> WING CENTER SECTION</td><td><input type="checkbox"/> LINK/ROD</td><td><input type="checkbox"/> CUT-OUT</td></tr><tr><td><input type="checkbox"/> WING DRY-BAY AREA/COMPT.</td><td><input type="checkbox"/> LONGERON</td><td><input type="checkbox"/> ACCESS/LIGHTENING HOLE</td></tr><tr><td><input type="checkbox"/> SPAR</td><td><input type="checkbox"/> FITTING</td><td><input type="checkbox"/> NOTCH/GROOVE</td></tr><tr><td><input type="checkbox"/> RIB</td><td><input type="checkbox"/> BRACKET/CLIP</td><td><input type="checkbox"/> DISCONTINUITY</td></tr><tr><td><input type="checkbox"/> LANDING GEAR BEAM</td><td><input type="checkbox"/> STOP</td><td><input type="checkbox"/> BASIC MATERIAL</td></tr><tr><td><input type="checkbox"/> FLAP TRACK</td><td><input type="checkbox"/> FASTENER</td><td><input type="checkbox"/> BUSHING</td></tr><tr><td><input type="checkbox"/> FAIRING</td><td><input type="checkbox"/></td><td><input type="checkbox"/> PIN</td></tr></table>			<input type="checkbox"/> FRAME/BULKHEAD	<input type="checkbox"/> SKIN	<input type="checkbox"/> JOINT/SPICE	<input type="checkbox"/> PRESSURE BULKHEAD	<input type="checkbox"/> PLATE/PANEL	<input type="checkbox"/> LUG	<input type="checkbox"/> FRAME AROUND OPENING	<input type="checkbox"/> CHORD	<input type="checkbox"/> WELD	<input type="checkbox"/> WINDOW FORGING	<input type="checkbox"/> STRINGER NO.	<input type="checkbox"/> BOND	<input type="checkbox"/> KEEL BEAM	<input type="checkbox"/> BEAM	<input type="checkbox"/> OPEN HOLE	<input type="checkbox"/> FLOOR	<input type="checkbox"/> STRUT/BRACE	<input type="checkbox"/> FASTENER HOLE	<input type="checkbox"/> WING CENTER SECTION	<input type="checkbox"/> LINK/ROD	<input type="checkbox"/> CUT-OUT	<input type="checkbox"/> WING DRY-BAY AREA/COMPT.	<input type="checkbox"/> LONGERON	<input type="checkbox"/> ACCESS/LIGHTENING HOLE	<input type="checkbox"/> SPAR	<input type="checkbox"/> FITTING	<input type="checkbox"/> NOTCH/GROOVE	<input type="checkbox"/> RIB	<input type="checkbox"/> BRACKET/CLIP	<input type="checkbox"/> DISCONTINUITY	<input type="checkbox"/> LANDING GEAR BEAM	<input type="checkbox"/> STOP	<input type="checkbox"/> BASIC MATERIAL	<input type="checkbox"/> FLAP TRACK	<input type="checkbox"/> FASTENER	<input type="checkbox"/> BUSHING	<input type="checkbox"/> FAIRING	<input type="checkbox"/>	<input type="checkbox"/> PIN	
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<b>7C. DISCREPANT PART:</b> GENERAL LOCATION (E.G., BILGE, UNDER GALLEY) _____ <table style="width: 100%;"><tr><td><input type="checkbox"/> BODY STA. NO. _____</td><td><input type="checkbox"/> DOOR/ACCESS PANEL</td><td><input type="checkbox"/> INTERIOR</td><td><input type="checkbox"/> EXTERIOR</td></tr><tr><td><input type="checkbox"/> WING STA. NO. _____</td><td><input type="checkbox"/> RUDDER</td><td><input type="checkbox"/> INBOARD</td><td><input type="checkbox"/> OUTBOARD</td></tr><tr><td><input type="checkbox"/> VERT. STAB. STA. _____</td><td><input type="checkbox"/> ELEVATOR</td><td><input type="checkbox"/> LEFT</td><td><input type="checkbox"/> RIGHT</td></tr><tr><td><input type="checkbox"/> HORIZ. STAB. STA. _____</td><td><input type="checkbox"/> ALERON</td><td><input type="checkbox"/> FORWARD</td><td><input type="checkbox"/> AFT</td></tr><tr><td><input type="checkbox"/> NACELLE/PYLON</td><td><input type="checkbox"/> FLAP</td><td><input type="checkbox"/> UPPER</td><td><input type="checkbox"/> LOWER</td></tr><tr><td><input type="checkbox"/> COMPARTMENT _____</td><td><input type="checkbox"/> SPOILER</td><td><input type="checkbox"/> LEADING EDGE</td><td><input type="checkbox"/> TRAILING EDGE</td></tr><tr><td><input type="checkbox"/> NOSE LANDING GEAR</td><td><input type="checkbox"/> TAB (ALSO CHECK ABOVE)</td><td><input type="checkbox"/> MIDDLE</td><td><input type="checkbox"/> SIDE</td></tr><tr><td><input type="checkbox"/> MAIN LANDING GEAR</td><td></td><td></td><td></td></tr><tr><td><input type="checkbox"/> WING LANDING GEAR</td><td></td><td></td><td></td></tr><tr><td><input type="checkbox"/> BODY LANDING GEAR</td><td></td><td></td><td></td></tr></table> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>INSPECTED BY _____</div><div>REPAIRED BY _____</div></div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"><div>ORIGINATED BY _____</div><div>DATE _____</div></div>			<input type="checkbox"/> BODY STA. NO. _____	<input type="checkbox"/> DOOR/ACCESS PANEL	<input type="checkbox"/> INTERIOR	<input type="checkbox"/> EXTERIOR	<input type="checkbox"/> WING STA. NO. _____	<input type="checkbox"/> RUDDER	<input type="checkbox"/> INBOARD	<input type="checkbox"/> OUTBOARD	<input type="checkbox"/> VERT. STAB. STA. _____	<input type="checkbox"/> ELEVATOR	<input type="checkbox"/> LEFT	<input type="checkbox"/> RIGHT	<input type="checkbox"/> HORIZ. STAB. STA. _____	<input type="checkbox"/> ALERON	<input type="checkbox"/> FORWARD	<input type="checkbox"/> AFT	<input type="checkbox"/> NACELLE/PYLON	<input type="checkbox"/> FLAP	<input type="checkbox"/> UPPER	<input type="checkbox"/> LOWER	<input type="checkbox"/> COMPARTMENT _____	<input type="checkbox"/> SPOILER	<input type="checkbox"/> LEADING EDGE	<input type="checkbox"/> TRAILING EDGE	<input type="checkbox"/> NOSE LANDING GEAR	<input type="checkbox"/> TAB (ALSO CHECK ABOVE)	<input type="checkbox"/> MIDDLE	<input type="checkbox"/> SIDE	<input type="checkbox"/> MAIN LANDING GEAR				<input type="checkbox"/> WING LANDING GEAR				<input type="checkbox"/> BODY LANDING GEAR			
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Figure F-2 DISCREPANT STRUCTURE REPORT FORM - SIDE 2

